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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,388	02/13/2001	Daniel Keith Tomaschko	S63.2-9711	2245
490	7590	08/11/2004	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			BUI, VY Q	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/781,388

Applicant(s)

TOMASCHKO ET AL.

Examiner

Vy Q. Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 27-30,42,43,45 and 46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-30,42,43,45 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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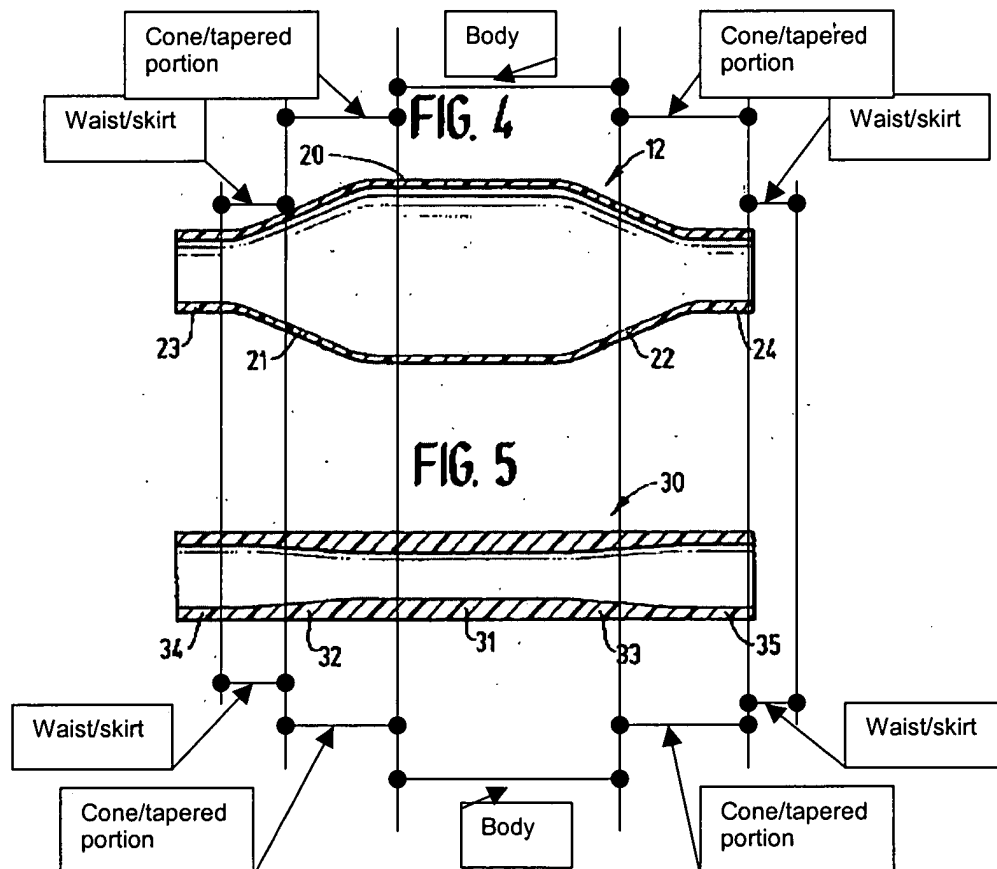
**DETAILED ACTION*****Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27-30 are rejected under 35 U.S.C. 102(b) as anticipated by WAND et al. (US Pat. 5,525,388).



As to claims 27-29, WAND (Figs. 4-5 above; column 2, lines 16-22) discloses balloon 12 having cone portions and body portion of a same wall thickness which has a variation less than 20% of a nominal or average wall thickness over substantially the

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entire length of the balloon. Since the wall thickness variation is about 20%, the cone wall thickness can be up to 20 % less than the body wall thickness. Balloon 12 has ground surfaces because the cone portions of balloon 12/parison 12 are thinned by machining, abrading or other suitable means (see WAND, col. 2, lines 45-53).

As to claim 30, WAND discloses balloon 12 has a constant thickness over substantially the entire length of the balloon because the waist portions are relatively short in comparison to the body and cone portions.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 42-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over WAND et al. (5,525,388) in view of NODDIN et al (4,906,241).

WAND discloses substantially all limitations in the claims, except for the thickness of the waist portions is no thicker than the thickness of the cone portions or body portion. However, NODDIN (Figs. 1 and 9a; col. 6, lines 21-26; col. 8, lines 43-54) discloses balloon 12 with cone/transition portions 54/56 of wall thickness  $t_{sub.t}$ , body portion of wall thickness  $t_{sub.b}$  and waist portions 58/60 of wall thickness  $t$  substantially the same as body thickness  $t_{sub.b}$ . Further, NODDIN discloses that  $t_{sub.t}$  is less than  $t_{sub.b}$  (see claim 17, NODDIN) for a low profile balloon catheter suitable for a small lumen. In view of NODDIN, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the material of the WAND parison/balloon by machining or abrading the waist portions of WAND balloon in order to have the thickness of the waist portions being no thicker than the thickness of the body portion as claimed so that the catheter can be suitable for a small lumen.

2. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over NODDIN et al (4,906,241) in view of RAU et al. (6,024,722).

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NODDIN (Figs. 1 and 9a; col. 6, lines 21-26; col. 8, lines 43-54) discloses balloon 12 with cone/transition portions 54/56 of wall thickness  $t_{sub.t}$ , body portion of wall thickness  $t_{sub.b}$  and waist portions 58/60 of wall thickness  $t$  substantially the same as  $t_{sub.b}$ . NODDIN (see NODDIN, claim 17) further discloses or  $t_{sub.t}$  thinner than  $t_{sub.b}$  for a low profile balloon catheter suitable for a small lumen. NODDIN does not disclose a balloon having an etched surface. However, RAU (col. 1, lines 32-45) discloses etching as a conventional method to make a balloon catheter. In view of RAU, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make NODDIN balloon catheter by an etching process as the etching process to make a balloon catheter is well known.

### ***Claim Objections***

Claim 43 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 43 fails to further limit the subject matter of previous claim 42.

### ***Response to Amendment***

As to claims 27-29, the Applicants assert that WAND (col. 2, lines 22-25) discloses the wall thickness of waist portions is generally thicker than the wall thickness of the body portion and the cone portions. However, claims 27-29 only require a condition of at least a thickness of a proximal cone portion or a distal cone portion is less than a thickness of the body portion, which condition is met by WAND as indicated in above rejection.

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As to claims 42-43, 45-46, NODDIN expressly discloses (see claim 17) cone portions' thickness less than body portion's thickness as recited in the claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 703-306-3420. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, McDermott or Shaver can be reached on 703-308-0858. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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08/09/2004

Vy Q. Bui  
Primary Examiner  
Art Unit 3731